

WHAT IS CLAIMED IS:

1. A shock mounting system for a 3-chip CCD camera assembly comprising a mounting member having a first light transmitting aperture and first, second and third color specific CCD's and associated component segments for receiving an image through said first aperture, each said CCD and associated component segments arrayed adjacent a main prism within a common plane perpendicular to said first aperture, said system comprising:

a pair of symmetrical support plates, one on each side of said common plane, each support plate comprising:

a first leg for being secured to said first CCD and associated components;

a second leg for being secured to said second CCD and associated components;

a third leg for being secured to said third CCD and associated components;

a support projection extending from said first, second and third legs;

a housing for receiving said camera assembly therein, said housing comprising a pair of opposed support projection receiving slots for receiving said support projections and means for resiliently securing said support projections within said housing; and

an elastomeric boot interposed between said securing means and said support plates comprising:

a front panel for receiving said mounting member of said camera assembly, said front panel having a second light transmitting aperture to permit image access to said main prism through said first aperture;

transversely spaced first and second side panels parallel to said common plane for receiving said first and second support projections;

a pair of longitudinally spaced, transversely extending enclosing panels perpendicular to each of said first and second side panels for forming therewith a pair of spaced three sided enclosures to receive said support projections.

2. A shock mounting system according to claim 1 wherein said resiliently securing means comprises:

a pair of transverse stop plates for abutting an opposed pair of said enclosing panels and for limiting longitudinal motion of said camera assembly, each stop plate having a pair of spaced apertures therein;

a plurality of screws for being received individually in said spaced apertures;

a plurality of opposed transverse boss surfaces within said housing to abut said stop plates;

means for abutting the other opposed pair of said enclosing panels to limit longitudinal motion of said camera assembly;

a plurality of screw receiving bores in the front of said housing for receiving said screws to thereby hold said stop plates against said boss surfaces and suspend said camera assembly within said elastomeric boot and between said stop plates and said abutting means.

3. A shock mounting system according to claim 2 further comprising longitudinally extending support surfaces for abutting said first and second side panels.

4. A shock mounting system according to claim 2 further comprising an alignment throughbore in each of said support projections, said throughbores aligned with said common plane, an alignment aperture in each said stop plate and in each said enclosing panel in alignment with said throughbore in said support projection and an alignment bore in the front of said housing.

5. A shock mounting system according to claim 1 wherein said support plates are produced from kovar.

6. A shock mounting system according to claim 1 wherein said first, second and third legs are co-planar.

7. A shock mounting system according to claim 1 further comprising planar side panel extensions integrally formed with said first and second side panels of said elastomeric boot.

8. A shock mounting system according to claim 1 further comprising electrical isolation means for isolating said camera assembly from said housing.

9. A shock mounting system according to claim 8 wherein said housing is made of a non-electrically conductive material.

10. A shock mounting system according to claim 9 wherein said housing is coated on at least a portion of its interior surface with an electrically conductive material and wherein said electrically conductive material is connected to ground.

11. A shock mounting system according to claim 10 further comprising interposing electrically non-conductive materials between said camera assembly and said housing.

12. A shock mounting system for a 3-chip CCD camera comprising a housing containing a camera assembly comprising first, second and third color specific CCD's and associated components, each said CCD and associated component arrayed adjacent a main prism within a common plane perpendicular to a light transmitting aperture in said housing, said system comprising:

elastomeric means interposed between said camera assembly and said housing for absorbing shock imposed on said case prior to their transmission to said camera assembly.

13. A shock mounting system according to claim 12 further comprising at least one transverse stop plate and a plurality of screws for being longitudinally received in said stop plate parallel to said common plane and perpendicular to said light transmitting aperture.